Human Netrin-4 Alexa Fluor® 405-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF1254V
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Netrin-4 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 50% cross-reactivity with recombinant mouse Netrin-4 is observed, 15% cross-reactivity with recombinant chicken (rch) Netrin-1 is o
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Netrin-4 Val26-Lys628 Accession # Q9HB63
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Netrins/UNC-6 (netr: Sanskrit for “one who guides”) are a family of laminin-related small proteins that are involved in neurite outgrowth and axon guidance. Netrins bind to the DCC and UNC5 family of receptors to attract or repel axons. Human Netrin-4 is synthesized as a 628 amino acid (aa) precursor that contains a 19 aa signal sequence, a 443 aa laminin-related region containing an N-terminal laminin globular domain (domain VI) followed by 3 laminin EGF-like repeats, and a 166 aa C-terminal domain rich in basic aa residues that serves as a heparin binding site. Unlike human Netrin-1 which is reminiscent of the laminin γ-chain, human Netrin-4 resembles the laminin β-chain. Netrin-4 has been reported to exist as both a monomer and a dimer. The dimeric form was reported to be the less active of the two. Human Netrin-4 shares 31%, 29% and 25% aa sequence identity with human Netrin-1, 2 and G2, respectively; it shares 89% aa identity with mouse Netrin-4. Netrin-4 has widespread expression, occurring in nervous tissues such as embryonic floor plate and postnatal neurons such as cerebellar granule cells and hippocampal pyramidal cells. It also is found in non-neural tissues, such as adult Bowman’s capsule and medullary tubular epithelium in kidney, and embryonic pancreatic and intestinal epithelium, plus cells of the ureteric bud. Netrin-4 expression is often associated with basement membrane. Netrin-4 has been shown to initiate axon outgrowth from olfactory bulb explants (1-7).

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